

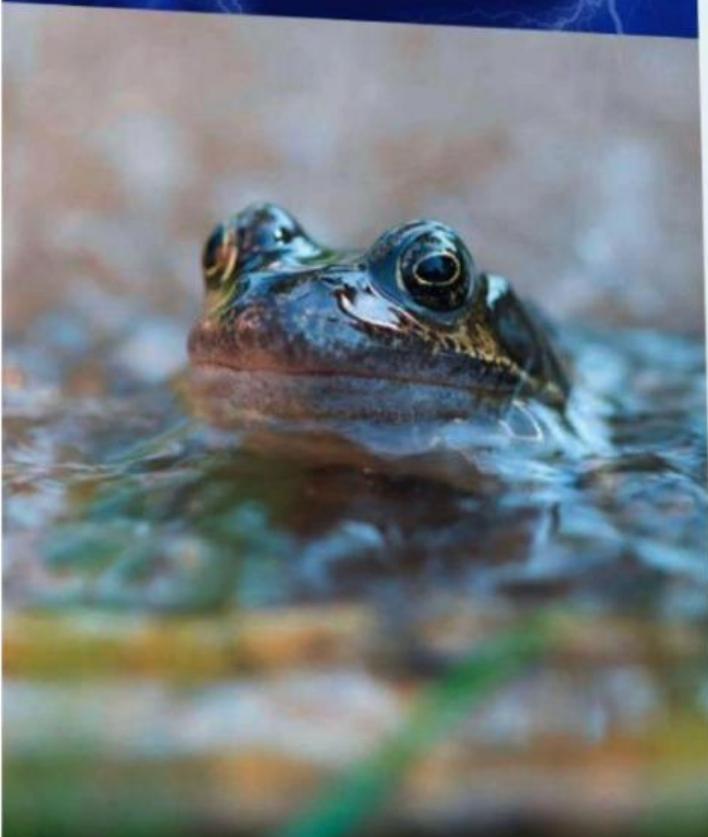
READING QUIZ 3

UNIT 5: NATURAL DISASTERS

Read the article and solve the exercises.

Freaky Forces of Nature

The forces of nature can be unbelievably powerful. Severe weather such as hurricanes, blizzards, flash floods and thunderstorms can cause serious damage and the loss of life. Some of Mother Nature's forces, however, are so bizarre and unexpected that they can only be described as freaky. Here are some examples.



A It's raining frogs!

The fastest wind speed ever recorded – 511km an hour – occurred during a tornado in the USA in 1999. Scientists **classify** tornadoes by the damage they can do. A tornado with wind speeds of 110km an hour can sweep away entire houses and throw cars through the air as if they were rockets. A tornado with wind speeds of more than 480km an hour has the power to **derail** trains, tear grass from the ground, and even rip pavements from the street. But that's not all tornadoes can do. Scientists believe that tornadoes can suck up the surfaces of lakes, rivers and other bodies of water. When they do, they can take frogs and fish along for the ride, and then drop them far away. This may have been the cause of the 'frog rain' in a town in Serbia. Small frogs rained on the town, sending residents running for cover as they tried to escape. 'I thought maybe a plane carrying frogs had exploded in mid-air,' said one resident.

B Flaming twisters

As if tornadoes aren't dangerous enough, one kind is made of fire! Wildfires are so powerful that they can create their own weather. As these fires burn, they consume huge quantities of oxygen. The intense heat causes the air to rise. When fresh air rushes in to replace it, strong winds are produced. Sometimes this makes the fire spin like a tornado. These fire whirls, or fire tornadoes, can be 15m wide and grow as tall as a 40-storey building. They generally last no more than a few minutes, but some have lasted as long as 20. They are, not surprisingly, one of the most dangerous natural disasters. In 1923 in Japan, a fire whirl killed 38,000 people who had gathered in an open space to escape being injured in an earthquake.

C Dodge balls

About 1,000 years ago, hundreds of people were mysteriously killed in the Himalayas. A recent investigation concluded that they were caught in a hailstorm and couldn't avoid being hit by chunks of ice the size of tennis balls that fell on their heads at more than 160km an hour. Hailstorms as deadly as this are rare, but hail itself is not uncommon. It is formed in storms when raindrops are carried into extremely cold areas of the atmosphere by powerful winds. The longer the tiny specks of ice bounce around in the wind, the bigger they become. When the pieces of ice grow too big for the wind to hold up, they fall to the ground as hail. Hail is most common during late spring and early summer when severe thunderstorms are more likely to occur.

D Gas attack!

When a volcano erupts, a glowing sea of **molten** lava often flows down its sides, destroying everything in its path. But a volcano can produce something even deadlier: a **pyroclastic** flow, which is a cloud of gas and rock that can reach temperatures above 500°C. The flow crashes down the side of a volcano like an avalanche. These flows typically reach speeds of more than 80km an hour. A pyroclastic flow will knock down, destroy, bury or carry away nearly everything it meets. It can destroy buildings, forests and farmland. People who are caught in the path are obviously among the victims too, but even people that are close by can die as the result of breathing in hot ash and gases. It was this kind of flow that famously destroyed the Roman cities of Pompeii and Herculaneum during the eruption of Mount Vesuvius nearly two thousand years ago.



PART A

Choose the best answer (a, b, c, or d) for each question.

1. What is the fastest wind speed ever recorded in a tornado?
 - a) 110 km/h
 - b) 160 km/h
 - c) 480 km/h
 - d) 511 km/h
2. How do scientists primarily classify tornadoes?
 - a) By their wind speed
 - b) By the damage they cause
 - c) By how long they last
 - d) By their width



3. **What unusual event happened in a town in Serbia?**
 - a) It rained fish and frogs.
 - b) A volcano erupted.
 - c) A fire whirl destroyed a building.
 - d) Giant hail hit a plane.
4. **What creates the strong winds in a fire whirl?**
 - a) Fresh air rushing in to replace oxygen
 - b) A nearby tornado
 - c) Falling rain hitting hot lava
 - d) An earthquake moving the ground
5. **How tall can a fire tornado grow?**
 - a) 15 meters
 - b) 160 meters
 - c) As tall as a 40-storey building
 - d) As tall as the Himalayas
6. **Where did hundreds of people die from a hailstorm 1,000 years ago?**
 - a) Serbia
 - b) The USA
 - c) Japan
 - d) The Himalayas
7. **What is the approximate size of the deadly hail mentioned in the text?**
 - a) The size of a grape
 - b) The size of a tennis ball
 - c) The size of a car
 - d) The size of a spec of ice
8. **What is a "pyroclastic flow"?**
 - a) A river of molten lava
 - b) A cloud of hot gas and rock
 - c) A tornado made of fire
 - d) A fast-moving hailstorm
9. **What is the maximum temperature a pyroclastic flow can reach?**
 - a) 80°C
 - b) 160°C
 - c) 500°C
 - d) 1923°C
10. **Which Roman city was destroyed by Mount Vesuvius?**
 - a) Rome
 - b) Pompeii
 - c) Serbia
 - d) Tokyo



PART B

Select TRUE OR FALSE

1. Tornadoes can be strong enough to derail trains.
2. Fire whirls can last for several hours.
3. A fire whirl in Japan killed 38,000 people in 1923.
4. Hail is formed in extremely hot areas of the atmosphere.
5. The longer ice bounces in the wind, the larger it becomes.
6. Pyroclastic flows move slowly, like a typical river.
7. You can die from a volcano just by breathing in hot ash.
8. Fire whirls are considered one of the most dangerous natural disasters.
9. Hail is most common during the winter months.
10. Tornadoes can suck up entire surfaces of lakes and rivers.

PART C

Select the short phrase to complete the sentences.

1. Scientists believe a tornado dropped frogs on a town in _____.
2. A tornado with speeds of _____ can rip pavements from the street.
3. Fire whirls are also known as _____.
4. The 1923 fire whirl in Japan happened after people gathered to escape an _____.
5. Hail is formed when _____ are carried into cold areas by powerful winds.
6. Deadly hailstones can fall at speeds of more than _____.
7. A pyroclastic flow crashes down a volcano like an _____.
8. Pyroclastic flows typically travel faster than _____ per hour.
9. The city of _____ was destroyed alongside Pompeii.
10. According to the text, the forces of nature are so bizarre they are described as _____.